CLASSIFICATION CONFIDENTIAL
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT
CD NO.

50X1-HUM

COUNTRY	USSR	DATE OF INFORMATION	1950 - 1952
SUBJECT	Economic; Technological - Machine tools		
HOW PUBLISHED	Daily newspapers	DATE DIST.	8 Jul 1952
WHERE PUBLISHED	USSR	NO. OF PAGES	3
DATE PUBLISHED	7 Feb - 25 Apr 1952		
LANGUAGE	Russian	SUPPLEMENT TO REPORT NO.	

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers as indicated.

NEW AUTOMATICS, LATHES, OTHER HEAVY MACHINE TOOLS

1952 ACCOMPLISHMENTS IN MACHINE TOOL BUILDING -- Yerevan, Kommunist, 25 Apr 52

In 3 months of 1952, enterprises of the Ministry of Machine Tool Building have developed 37 new models of high-duty metal-cutting and woodworking machine tools and eight original types of press and forging equipment. Automatic lathes, powerful milling and planing aggregates for machining huge machines parts, drilling machines, and grinding machines have been manufactured.

The news of the year is a unique automatic transfer line produced by the Moscow Krasnyy Proletariy Plant imeni Yefremov. Seven-meter reinforcing frames for reinforced concrete can be manufactured on it. The entire production cycle takes 6 minutes. Three men attend the line.

BUILD UPSETTING AUTOMATICS FOR BEARING INDUSTRY -- Alma-Ata, Kazakhstanskaya Pravda, 21 Mar 52

Automatics for cold and hot upsetting of balls and rollers, produced by the Chimkent Presses and Automatics Plant imeni M. I. Kalinin, have shown good results in operation at the Moscow First State Bearing Plant imeni L. M. Kaganovich, the Kuybyshev Bearing Plant, and many other enterprises of the country.

Abramov, chief engineer of the Kuybyshev Bearing Plant, enclosed a table with his letter of commendation to the Chimkent plant. The data is striking: 232 kilograms of metal are used for manufacturing 1,000 rollers on the new automatic; whereas in grinding this same quantity of rollers, 366 kilograms are consumed. The productivity of the automatic is more than eight times as great as the productivity of a lathe.

The task of developing this automatic was assigned to Aleksandr Lavrent'yevich Borisov. After 3 months of research and persistent effort, the design of the machine was completed. The manufacture of parts for it was started at

CLASSIFICATION CONFIDENTIAL

STATE	X	NAVY	X	NSRB		DISTRIBUTION
ARMY	X	AIR	X	FBI		

Sanitized Copy Approved for Release 2011/08/19 : CIA-RDP80-00809A000700070294-7

the end of April 1950. In October 1950, the automatic, bearing the plant number A-148-A, was finished in rough form and just before the new year, 1951, it was approved by a government commission. Series production was started.

A. L. Borisov, A. I. Soplyakov, V. A. Ruzheynikov, and L. P. Verevkin were awarded a Stalin Prize for developing cold and hot upsetting automatics.

PRODUCE NEW AUTOMATICS -- Minsk, Sovetskaya Belorussiya, 23 Mar 52

Enterprises of the Ministry of Machine Tool Building have mastered the production of high-duty equipment for various branches of the national economy.

Of great technical interest is an automatic which is used for the manufacture of so-called railroad anticreepers. Millions of such parts needed by transport are being produced 100 times as fast as by the old method. With the use of four automatics, 7 000 tons of metal will be saved annually, and the cost of producing the parts will be decreased by 16 million rubles.

For the first time in machine building practice, Soviet machine tool builders have designed an automatic for slotting screws. In contradistinction to existing designs, this aggregate operates on the principle of continuous movement. The blanks proceed mechanically from a hopper to the machine tool. After completion they are packed automatically. The entire slotting process is accomplished 8-10 times as fast as on old machine tools.

GET PRIZE FOR DEVELOPING 120-TON ROLL TURNING LATHE -- Leningradskaya Pravda, 19 Mar 52

N. A. Bondarchik, chief designer; A. A. Ivanitskiy and F. P. Ovcharenko, engineers; and a group of other specialists of the Kramatorsk Heavy Machine Tool Building Plant have been awarded a Stalin Prize for the development of heavy machine tools for processing large rollers.

One of the machine tools designed and built by the Kramatorsk machine-tool builders is the Model 1827-S roll-turning lathe. It consists of 12,850 parts and weighs 120 tons. It is approximately 15 meters long and more than 3 meters high. Rollers up to 50 tons in weight, one meter in diameter, and 6½ meters long can be roughed and calibrated on it.

A roller can be machined on this machine tool with three cutters operating simultaneously. Each cutter removes a metal chip up to 40 millimeters wide and 3 millimeters thick. A powerful electric drive permits the machining of a heavy part at a speed of 350 meters per minute.

In 1951, the Kramatorsk plant also built two models of roller grinding machines.

The first models of the heavy lathes were sent to the Magnitogorsk Metallurgical Combine. A letter sent by the combine to the Kramatorsk plant included the following:

"Your machine tools have proved successful in operation. In their design and operating qualities, they are superior to similar machine tools produced abroad."

MANUFACTURE NEW HEAVY MACHINE TOOLS -- Moscow, Pravda, 7 Feb 52

The Novosibirsk Tyazhstankogidropress Plant imeni Yefremov has begun production of five new types of machines tools, three of which are intended for machining parts of turbines and other aggregates for construction projects.

Plant personnel are now manufacturing a gigantic planing machine. It can machine parts with a surface area of 48 square meters and up to 100 tons in weight. Dozens of flatcars are needed to transport the machine.

IMPROVE GIGANTIC VERTICAL LATHE -- Moscow, Trud, 6 Apr 52

A year ago, the first gigantic vertical lathe consisting of 19,000 parts was built at the Novosibirsk Tyazhstankogidropress Plant. Work is now being completed on the second machine tool of this type. Parts for huge hydroturbines for construction projects will be machined on it.

The machine is as tall as a three-story house. The cross rail on which the heads will travel weighs 50 tons.

In the assembly of the first machine, 6, 7, and even 8 hours were spent for each lifting and tilting of the faceplate. This operation now takes only 1 hour 20 minutes, and is repeated ten times.

The adjustment must be made very carefully, to micronic accuracy. When they begin to machine parts 160 tons in weight, the total load on the base and ways surface exceeds 200 tons. To ease this heavy load, the designers have developed a completely original system of lubrication. The pump will force oil under great pressure into the gaps between the rubbing surfaces creating an oil bath in which the 200-ton mass of metal virtually floats.

NEW MILLING MACHINES -- Moscow, Izvestiya, 16 Mar 52

Z. I. Kovel'chuk and a group of workers at the Kolomna Heavy Machine Tool Building Plant have developed a group of gear milling machines for machining gears from 1.5 to 5 meters in diameter. In their universality and productivity, the machine tools are superior to similar foreign models.

TEST NEW HIGH-SPEED BORING MACHINE -- Moscow, Moskovskaya Pravda, 5 Apr 52

A group of designers at the Leningrad Machine Tool Building Plant imeni Sverdlov has developed a unique machine tool for high-speed boring of electric locomotive motor frames. It has two spindles and automatic remote control, as a result of which the worker has only to press the proper buttons on a panel. The productivity of the new machine tool is four times as great as earlier models.

Testing of the aggregate has been completed. It showed exceptional operating and technical qualities.

Moscow, Pravda, 10 Apr 52

A new machine tool for high-speed boring of electric locomotive motor frames designed at the Leningrad Machine Tool Building Plant imeni Sverdlov is 11 meters long and weighs 70 tons.

COMPLETE ASSEMBLY OF TWO NEW GRINDING MACHINES -- Moscow, Izvestiya, 11 Apr 52

The Khar'kov Machine Tool Building Plant imeni Molotov has completed assembly of two new powerful grinding machines for machining large shafts. The first of these machine tools weighs 80 tons and has 22 motors and electric generators. Parts 6 meters long and up to 1½ meters in diameter can be machined on it. The second machine tool weighs 60 tons. Both machines were developed by A. Sheryshev and E. Berlyavskiy, plant designers.

E N D